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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

YOUNGBERG et al.

Serial No. 10/822,683

Filed: April 13, 2004

For: PRESSURE REGULATOR WITH SINGLE STRUT  
REGULATOR SEAT



Atty. Ref.: 737-259

TC/A.U.: 3753

Examiner: Unknown

\* \* \* \* \*

July 15, 2005

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**PETITION TO MAKE SPECIAL**

Applicant hereby petitions the USPTO to grant special status to the instant application pursuant to Section 708.02 VIII.

The above application was filed in the USPTO on April 13, 2004. A recent status inquiry with the Examiner to whom the application has been assigned, revealed that the application was not likely to be examined at least until the spring of 2006. Since the granting of an official patent on the subject invention is extremely important to the assignee, applicant requests that the application be granted special status and thereafter taken up by the Examiner before all other categories of applications except those that clearly are in condition for allowance and those with set time limits.

Pursuant to Part VIII of Section 708.02 of the MPEP, applicant asserts that all claims in the application are directed to a single invention, but if the USPTO determines

that all claims presented are not directed to a single invention, applicant agrees to make an election without traverse.

A pre-examination search was made for the subject invention. The search was conducted in Class 137, Subclass 505.25 and Class 251, Subclasses 359-363. The latter subclasses were keyword-searched using "seat" in the same paragraph with "single" or "support" or "sole," and were also manually searched back to December of 1978. Prior art documents uncovered in that search were identified to the Examiner in an Information Disclosure Statement filed June 28, 2004. A copy of that Statement is attached along with complete copies of each of the cited references.

A brief summary of each reference is provided below.

The '848 published patent application discloses a regulator valve that includes a first plunger 68, the upper end of which is adapted to engage a core portion 54 of a diffuser 52. Core 54 is supported by six spaced radial vanes 56 as best seen in Figures 3, 4 and 5. The '848 publication neither discloses nor even remotely suggests a seat "supported centrally within said fluid passage by a single radially-oriented strut" (claim 1); "a seating surface supported concentrically within said center opening by a single radially-oriented strut" (claim 10); or "an annular support ring...having a seating surface supported concentrically within said center opening by a single radial strut connected to an underside of said disk...wherein said underside of said strut is formed with an underside that slopes in a downstream direction from the radially outer end thereof to a radially inner end thereof" (claim 19).

The '853 patent to Callies discloses a regulator valve similar to that disclosed in the '848 application in that the first plunger 68 is adapted to engage a seal member 58 mounted in the core component 54 of a diffuser 52. The core component 54 is also supported in the flow stream by a plurality of radially oriented vanes 56. This patent fails to disclose or suggest the claimed subject matter for the same reasons presented above with respect to the '848 publication.

The '445 patent to Dvorak et al. discloses a multi-vane flow rate stabilizer for throttling valves. The throttling valve 30 incorporates a seat ring 32 incorporating one or more vanes disposed in a fluid inlet passageway extending from a seat ring disposed between the fluid inlet passageway and the fluid outlet. Note that the seat ring 32 is supported within the fluid passageway by a peripheral ring member 40 disposed against an annular ledge 42 formed in the valve 30. Thus, the one or more vanes 54 has no support function vis-à-vis the seat 32. Rather, the vane serves only as a flow disturbance reduction member. Thus, the seat ring is not supported centrally within a fluid passage by a single radially oriented strut (claims 1 and 10); nor is the disk supported concentrically within the center opening by a single radial strut connected to an underside of the disk..." (claim 19).

The '757 patent discloses a pressure regulator apparatus wherein a throttling seat (Fig. 3) is supported in the flow passageway by a plurality (5) of radial struts or spokes (see Figs. 2 and 4). The '757 patent thus also fails to disclose or suggest the single strut arrangement required by the independent claims of this application.

The '815 patent discloses a combination pressure regulator/drain check valve where the pressure regulator seat 26 is supported within a flow path by a plurality of webs or spokes 30 (see Figs. 2, 6 and 7). The '815 patent also fails to disclose or suggest the single strut arrangement required by all of the independent claims in this application.

The '646 patent discloses an O-ring damped regulator. In this patent, regulator seat 26 includes a conical center portion 30 that terminates in an annular seat surface 32. The conical portion 30 is connected radially to the outer annular wall 28 by means of a plurality of webs 34 (see column 3, lines 48-50), only one of which is visible in Figure 1. Here again, the reference fails to disclose or suggest the single strut arrangement required by the independent claims of this application.

The '485 patent discloses a valve construction wherein valve member 38 is supported centrally within a flow path by a plurality of radially arranged struts or strands 48 (see Fig. 2). This reference also fails to disclose or suggest the single strut arrangement required by the independent claims of this application.

Having met all of the requirements of Section 708.02 Part VIII of the MPEP, applicant requests that this petition be granted in expeditious fashion and that the special examination procedure set forth in Part VIII be initiated without further delay.

The petition fee set forth in 37 CFR 1.17(h) is attached.


The Commissioner is hereby authorized to charge any deficiency in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper

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hereafter filed in this application by this firm) to our **Account No. 14-1140**. A duplicate  
copy of this sheet is attached.

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

By:   
Michael J. Keenan  
Reg. No. 32,106

MJK:ljb  
901 North Glebe Road, 11th Floor  
Arlington, VA 22203-1808  
Telephone: (703) 816-4000  
Facsimile: (703) 816-4100

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Examiner: Unknown

\* \* \* \* \*

June 28, 2004

**COPY**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

INFORMATION DISCLOSURE STATEMENT

As suggested by 37 C.F.R. 1.97, the undersigned attorney brings to the attention of the Patent and Trademark Office the patents listed on the attached form PTO-1449.

- ☐ All listed documents are attached.
- ☒ This application was filed after June 30, 2003 so that copies of U.S. Patent Publications are not required and are not attached.
- ☐ Listed foreign patent publications and other documents are enclosed.
- ☐ The listed documents were cited in the ISR and copies should have been supplied by WIPO directly to the US PTO. If copies are not timely received from WIPO, please telephone the undersigned so that copies can be timely supplied for the Examiner's consideration in this US National Phase Application.

This is not to be construed as a representation that a search has been made or that no better prior art exists, or that a reference is relevant merely because cited.

The Examiner is requested to initial the attached form PTO-1449 and to return a copy of the initialed document to the undersigned as an indication that the attached patents have been considered and made of record.

The undersigned attorney of record hereby certifies under 37 C.F.R. §1.97(e) that each item of information referenced herein and attached hereto was first cited in a

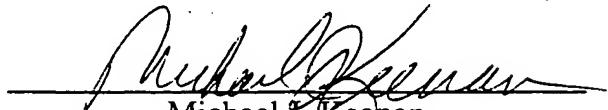
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communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement.

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

By: \_\_\_\_\_



Michael J. Keenan

Reg. No. 32,106

MJK:ljb

1100 North Glebe Road, 8th Floor  
Arlington, VA 22201-4714  
Telephone: (703) 816-4000  
Facsimile: (703) 816-4100

## INFORMATION DISCLOSURE CITATION

ATTY. DOCKET NO.

737-259

**APPLICANT**

YOUNGBERG et al.

FILING DATE

April 13, 2004

SERIAL NO.

10/822,683

TC/A.U.

3753



(Use several sheets if necessary)

## U.S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

[illegible]

OTHER DOCUMENTS (including Author, Title, Date, Pertinent pages, etc.)

[illegible]

\*Examiner

Date Considered

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.